HAZARDOUS WASTE

Shoptalk

WASHINGTON STATE DEPARTMENT OF ECOLOGY

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WASHINGTON STATE'S BEYOND WASTE PROJECT

"We can transition to a society that views wastes as inefficient use of resources and believes that most wastes can be eliminated. Eliminating wastes will contribute to environmental, economic and social vitality."

This is the proposed vision for the new state plan for hazardous waste. Until now, Ecology's major focus has been on managing wastes. While we know that in the immediate future we will need to continue managing wastes, the plan will also include strategies to achieve the eventual elimination of most hazardous waste — to go "beyond waste." Granted, it may take many years to succeed, but unless we establish a goal of eliminating most wastes, our focus will always be on managing it.

Why is this necessary?

In order for Washington to stay competitive in today's markets and maintain the quality of life that draws people to this region, we need to be efficient in our use of resources. We cannot continue to spend so much time and money protecting ourselves from the hazards in our environment while throwing away so much that could still be useful.

Governor Gary Locke said, "A healthy economy in Washington will reflect a recognition of the value of a healthy environment. As we move towards a more sustainable state, we will strengthen the well-being of residents in communities large and small, urban and rural."

The last state hazardous-waste plan was written in 1992 and was updated in 1994. Many changes have occurred in the hazardous-waste arena in the past decade. We now know much more about the toxicity of many wastes and have more ideas about how to reduce their generation.

Ecology submitted a proposal to the Legislature in 2001 for partial funding to update the state hazardous-waste plan. The funding was approved and members of Ecology's staff have started the planning process.

The state's solid-waste plan is also being updated, so to help save resources, the two programs are working together with the hired consultants to study waste issues. This dual state-planning effort is called the Beyond Waste project.

Members of Ecology staff have identified key issues in hazardous-waste management. In addition to the consultant research, Ecology experts are writing a series of issue papers.

We know that many of our readers have knowledge and expertise in these areas as well. We plan to tap into this knowledge through focus groups, web site feedback, a survey and public meetings.

To learn more about the Beyond Waste project, visit the web site at *http://ww.ecy.wa.gov/beyondwaste*. You can also e-mail feedback and be put on a mailing list.

If you have questions or would like more information, contact Chris Chapman at (360) 407-7160, or by e-mail at *ccha461@ecy.wa.gov.*

"About 94% of the materials extracted for use in manufacturing durable products become waste before the product is manufactured. 80% of what we make is thrown away within six months of production."

Paul Hawken, Natural Capitalism

Inside

HWTR Info at the Click of a Mouse

Have you visited Ecology's Hazardous Waste and Toxics Reduction web site lately? In response to comments and suggestions, HWTR has redesigned the web site to make it easier for you to find the information you need.

The HWTR main page includes "featured items" – the most current information up front, with links to more detail. Content is organized into these categories:

- Hazardous Waste Management Requirements – Find dangerous-waste regulatory requirements, as well as information on labeling and how to find contractors to handle your waste properly.
- Reducing Hazardous Wastes and Substances – Learn how to reduce waste and make your business more efficient. Access the latest information about sustainability.
- Reporting Requirements – Access forms, instructions and software downloads to make your reporting tasks more manageable.
- Hazardous Chemicals in Your Community – Find answers to your questions about chemicals in your community, health risks of specific chemicals, and chemical ingredients in the fertilizer you use in your yard.
- HWTR Overview – Get information about Ecology's Hazardous Waste and Toxics Reduction Program, including links to other resources.

Visit the web site at *http://www.ecy.wa.gov/programs/hwtr* and e-mail any comments about the new format to Joan Morris at *jmor461@ecy.wa.gov*.

Considering Buying a Still?

Many companies find it beneficial to operate an on-site still. They are able to reclaim used solvent at a fraction of the cost of new solvent and reduce the volume of hazardous waste sent off-site.

However, before buying a still, you should ask your supplier these questions:

- ✓ Will the unit distill the solvent without a vacuum? Vacuum units are more expensive, although they do offer advantages.
- ✓ Will the supplier distill a sample of the spent solvent with the proposed system and provide an analysis of the recycled solvent? You can then evaluate the quality of the distilled product and determine how much of the waste can be recovered.
- ✓ Will any of the still's components deteriorate after extended use? Only stainless steel and Teflon fittings and gaskets will stand up to repeated use with some solvents.
- ✓ What are the operating costs? Costs of labor, electricity and liners should also be included. Compare these costs with projected savings from reduced purchases of virgin solvent and reduced disposal costs.

Other issues you should consider before buying a still:

- ✓ You should let the supplier know if you plan to distill products that contain nitrocellulose. Special precautions must be taken when recycling solvents containing this material. (See next article, right.)
- ✓ How will the still bottoms be managed? How much will it cost for disposal? Most still bottoms must be managed as dangerous waste.
- ✓ Prior to purchasing a still, be sure to check with the fire department, building inspector, and your insurance company. You may need to construct a fireproof room.

Contact your nearest Ecology regional office for more information.

Distilling Solvents That Contain Nitrocellulose

If you intend to distill solvents that contain nitrocellulose, there are some special issues that you should know. Nitrocellulose is a thermoplastic polymer that decomposes at elevated temperatures, and special precautions must be taken when recycling solvents or products that contain this material.

Distillation of nitrocellulose requires special operating conditions (vacuum) and equipment (temperature and control monitors) as well as a backup safety system (water quench). It is extremely important to make sure that the equipment manufacturer's system and recommendations include a safe "nitrocellulose package."

Nitrocellulose is commonly found in inks, paints, and lacquers. Print shops, paint shops, and wood-finishing shops should carefully evaluate all products for nitrocellulose content prior to purchasing a still. Material Safety Data Sheets (MSDS) are the best source for determining whether nitrocellulose is present. CAUTION: it is not uncommon for an MSDS to list only the chemicals of highest concentration. Chemicals of lower concentration, or those that are proprietary may not appear on the MSDS. If the MSDS does not report 100% of the chemicals in the product, contact the supplier to find out what else is in the product.

Ecology staff have talked to businesses who purchased a still, unaware that some of the products they use contained nitrocellulose. After repeated failures (corrosion, explosion, fires) these stills were generally abandoned. These situations could have been avoided had the owners known that nitrocellulose was present in materials they intended to distill.

Ecology Streamlines Regulation of Computer Monitors

Ecology has issued an enforcement policy* to make it easier to recycle computer monitors (see sidebar for highlights). The policy reduces the regulatory burden for those who recycle computer monitors that contain cathode ray tubes (CRTs). Lead in computer monitors is the main concern.

The policy includes requirements for generators, transporters, and those who collect, accumulate, and dismantle CRTs and related equipment. Other personal computer-related electronic wastes that designate as hazardous waste may also be managed under this policy. Dismantlers are subject to additional requirements.

Ecology will evaluate how well this approach works before developing a regulation to take the place of the policy. EPA just proposed their rule for management of this waste stream. Evaluation of both the federal regulation and Ecology's pilot approach will be used to determine an appropriate regulatory approach for Washington State.

CRTs that are intended to be disposed (rather than recycled) at any point in the process and residues from these activities must be properly designated and managed under the *Dangerous Waste Regulations.* Ecology will enforce proper designation and management under the existing dangerous waste requirements for these wastes.

If your computer equipment is reused by someone else, it is not considered a waste. Reuse is a good way to keep equipment out of the waste stream.

To obtain a copy of the policy contact Dave Zink at (360) 407-6752 or send an e-mail to *dzin461@ecy.wa.gov*. You may also download it from Ecology's web site *http://www.ecy.wa.gov/pubs/0204017.pdf.*

**Ecology will use its enforcement discretion and not enforce the* Dangerous Waste Regulations *if the requirements in the policy are followed.*

CRT Policy Highlights

Televisions and computer monitors that contain CRTs:

- ✓ Must be recycled (e.g., glass to glass, metal to smelter)
- ✓ May be sent to an intermediary who collects and dismantles
- ✓ Do not need to be counted or manifested
- ✓ Must be accumulated in a way to minimize breakage
- ✓ May not be accumulated for more than 180 days

Close Up: King County Rehab the Lab A 2001 Governor's Award Winner

King County Rehab the Lab was one of nine winners of the 2001 Governor's Award for Pollution Prevention and Sustainable Practices. This multi-agency program helps schools dispose of old hazardous chemicals, stabilize potentially explosive compounds and reduce hazardous-waste generation. All King County middle and high schools are eligible to receive the services of this program, which include: •on-site consultations, •pollution prevention education, •full cost coverage for chemical stabilization, and •disposal of old chemicals and hazardous wastes from schools. King County Rehab the Lab also provides training to help science teachers develop safer labs and compatible storage for the chemicals they continue to use.

This program has proven to be so successful that a diverse group representing education, environmental, and health agencies and associations has formed a work group to try to expand the program statewide. Once funding is secured, the program will employ chemical specialists to work with science teachers in middle and high schools statewide.

For more information on the statewide program, contact Cindy Moore with the Environmental Protection Agency at (360) 753-9469 or send an e-mail to *moore.cindy@epa.gov*.

Rehab the Lab's Will Perry, Cheri Grasso, Lisa Niehaus, and Gwen Vernon receive congratulations from Governor Locke.

Questions and Answers:

Q How should circuit boards that are being recycled be managed?

A Spent printed circuit boards may be managed under the scrap metal exemption in the *Dangerous Waste Regulations* (WAC 173-303-071(3)(ff) or (gg)).

Q Would rags that have had a non-flammable solvent, e.g., methanol, applied to them designate as an F003 waste?

A No. The "cleaning agent" is a mixture of methanol and a rag (assuming the methanol was added first to the rag).

To qualify as an F003 waste, the solvent or solvent mixture used for cleaning can only be made up of either 100% methanol, a mixture of 100% methanol and other solvents (e.g., xylene, acetone) that fall under the F003 listing description, or a solvent mixture of any amount of methanol with at least 10% by volume of one or more of the F001 - F005 solvents.

In this case, the mixture of a rag and methanol solvent would not fit the F003 listing description. Therefore, the waste generated from the cleaning activity should be checked against the characteristic and criteria designations.

2000 Toxic Release Inventory Available

The Toxic Release Inventory Display System (TRIDS) now includes data for the reporting year 2000. TRIDS is a free computer program that provides a graphic display of data reported under the federal Emergency Planning and Community Right-to-Know Act (EPCRA). The data includes reported chemical releases to air, land, water and off-site locations as well. TRIDS can be downloaded from the Internet at *http://www.ecy.wa.gov/programs/hwtr/epcra/trids/ndex.html.* A CD version of this free program is also available by calling (360) 407 - 6727 or e-mailing a request to *hsio@ecy.wa.gov*. TRIDS comes preloaded with Washington State data, but data for other states can be downloaded from EPA at *http://www.epa.gov/triinter/tridata/index. htm* and used in the program.

TRI data is also available in publication form. You can access the publication *Chemicals in Washington State Summary Report 2000*, #02-04-020 on Ecology's web site at *http://www.ecy.wa.gov/ biblio/0204 020. html*. The report includes information from the Toxic Release Inventory and the Tier Two Hazardous Chemical Inventory. A listing of 2000 TRI reports by county, facility and chemical is also available, Appendix 6, at *http://www.ecy.wa.gov/biblio/0204021.html*.

Department of Ecology

Remember, your business is liable for all hazardous wastes generated. If you are uncertain about your responsibilities as a hazardous waste generator, call your nearest Ecology office and ask for a hazardous waste specialist. For information on reducing or recycling hazardous waste, ask for the toxics reduction staff, also at the following numbers:

Bellevue:	(425) 649-7000
Lacey:	(360) 407-6300
Yakima:	(509) 575-2490
Spokane:	(509) 456-2926

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Shoptalk is produced quarterly by the Washington State Department of Ecology, Hazardous Waste and Toxics Reduction Program
Editor: *Peggy Morgan (360) 407-6739*
E-mail address: pmor461@ecy.wa.gov
Production Team: *Cathy Bouge, Joan Morris*
Technical Editor: *Chipper Hervieux*
Contributors: *Chris Chapman, Tom Cusack, Idell Hansen, Chipper Hervieux, Vern Meinz, Peggy Morgan, Diana Olegre, Joanne Phillipson*
Distribution/Mailing List: Visit *Shoptalk* online at *http://www.ecy.wa.gov/programs/hwtr/shoptalkonline* or to subscribe, e-mail Cathy Bouge at *cbou461@ecy.wa.gov*

Washington State Department of Ecology
Hazardous Waste and Toxics Reduction Program
P.O. Box 47600
Olympia, WA 98504-7600